Bioelectrochemistry and Bioenergetics, 32 (1993) 317
Elsevier Sequoia S.A., Lausanne

Author index

Akiba, M. 277
Alonso, R.M. 57

Babincová, M. 187
Bauer, E. 89
Berg, H. 89
Bisch, P.M. 305
Blank, M. 203
Bolognani, L. 155
Bosco, M. 181

Cássia-Moura, R. 175
Cortez-Maghelly, C. 305
Costato, M. 155

Dimitrov, D.S. 99
Doltchinkova, V. 77

Frederiksen, J. 125

Glezer, V. 1
Goodman, E.M. 125
Greenebaum, B. 125

Homma, T. 133
Horii, H. 277
Hyuga, H. 15

Jiménez, R.M. 57

Karyakin, A.A. 35
Karyakina, E.E. 35
Kerns, G. 89
Kinosita, Jr., K. 15
Kuznetsova, E.V. 267

Legorburu, M.J. 57
Levengood, W.C. 165
Liboff, A.R. 67

Majni, G. 155
Matsuoka, H. 133
McLeod, B.R. 67
Metlička, R. 45
Milani, M. 155
Milkov, D. 77
Morita, N. 277

Naidenov, N. 77
Nakanishi, H. 27
Nakata, K. 277
Nemoto, Y. 133

Oktyabrsky, O.N. 267, 287

Reisenhofer, E. 181
Rizzo, R. 181

Saito, M. 133
Santhanam, K.S.V. 211
Saulis, G. 221, 237, 249
Skládal, P. 145
Smirnova, G.V. 267, 287
Smith, S.D. 67
Stradins, J. 1
Strakhova, A.K. 35
Sy, D. 295

Turovska, B. 1

Varfolomeyev, S.D. 35
Venslauskas, M.S. 221, 237

Wakabayashi, N. 15

Yamaguchi, H. 27
Yamamoto, I. 277
Yatsimirsky, A.K. 35

Bioelectrochemistry and Bioenergetics, 32 (1993) 319–322
Elsevier Sequoia S.A., Lausanne

Subject index

Activation kinetics
Activation kinetics of the incorporation of colicin Ia into an artificial membrane: a Markov or a fractal model? (Cássia-Moura) 175
Alternating electric fields
Steady-state deformation of a vesicle in alternating electric fields (Hyuga et al.) 15
Amperometric biosensors
Effects disturbing signal stability of amperometric biosensors for long-term measurements (Skládal) 145
Antibiotic peptide
Modelling of the antibiotic peptide Ro 09-0198: specific interactions of Ro 09-0198 with phospholipidic molecules (Sy) 295
Artificial electron acceptors
Effect of artificial electron receptors on the non-linearity of the current-induced voltage response in the membrane of the green alga *Hydrodictyon reticulatum* (Metlička) 45
L-Ascorbic acid
Oxidation intermediates of L-ascorbic acid 2-glucoside by pulse radiolysis (Horii et al.) 277

Bioelectrochemical activity
The electrochemical polymerization of methylene blue and bioelectrochemical activity of the resulting film (Karyakin et al.) 35
Biomimetic devices
Modulation of electrical responses of a photochromic membrane by light (Nakanishi, Yamaguchi) 27

Carboxymethylagar
Ion interaction with carboxymethylagar: a polarographic study (Bosco et al.) 181
Cell electroporation
Cell electroporation. Part 1. Theoretical simulation of the process of pore formation in a cell (Saulis, Venslauskas) 221
Cell electroporation. Part 2. Experimental measurements of the kinetics of pore formationin human erythrocytes (Saulis, Venslauskas) 237
Cellulase fermentation
Electrostimulation of cellulase fermentation by pulsatile electromagnetically induced currents (Kerns et al.) 89
Charge-transfer complexes
Electrochemical potentials, charge-transfer and complexation properties of quinoid systems (Stradins et al.) 1
Cholinesterase
Effects disturbing signal stability of amperometric biosensors for long-term measurements (Skládal) 145
Colicin Ia
Activation kinetics of the incorporation of colicin Ia into an artificial membrane: a Markov or a fractal model? (Cássia-Moura) 175
CO_2 stress
Intracellular potential change of *Tradescantia virginiana* L. leaf in response to CO_2 stress (Saito et al.) 133
Cyclotron resonance fields
Effects of CR-tuned 60 Hz magnetic fields on sprouting and early growth of *Raphanus sativus* (Smith et al.) 67

E. coli
Ferricyanide reduction by *Escherichia coli* cells: probable contribution of low molecular weight thiols (Oktyabrsky et al.) 267
Changes in redox potential of *Escherichia coli* culture and in extracellular glutathione status under osmotic shock (Oktyabrsky, Smirnova) 287
Electrochemical polymerization
The electrochemical polymerization of methylene blue and bioelectrochemical activity of the resulting film (Karyakin et al.) 35

Electrochemical potentials
Electrochemical potentials, charge-transfer and complexation properties of quinoid systems (Stradins et al.) 1
Electrofusion
Kinetic mechanisms of membrane fusion mediated by electric fields (Dimitrov) 99
Electromagnetic fields
ATPase and ATPsynthetase activity in myosin exposed to low power laser and pulsed electromagnetic fields (Bolognani et al.) 155
Biological effects of electromagnetic fields (Blank) 203
Electron affinity
Electrochemical potentials, charge-transfer and complexation properties of quinoid systems (Stradins et al.) 1
Electrophoresis
Organelle electrokinetics within plant cells (Levengood) 165
Electropolymerization
The electrochemical polymerization of methylene blue and bioelectrochemical activity of the resulting film (Karyakin et al.) 35
Electroporation
Steady-state deformation of a vesicle in alternating electric fields (Hyuga et al.) 15
Kinetic mechanisms of membrane fusion mediated by electric fields (Dimitrov) 99
Electrostimulation
Electrostimulation of cellulase fermentation by pulsatile electromagnetically induced currents (Kerns et al.) 89
Biological effects of electromagnetic fields (Blank) 203
Elongation modulus
Steady-state deformation of a vesicle in alternating electric fields (Hyuga et al.) 15
Environmental effects
Biological effects of electromagnetic fields (Blank) 203
Enzyme electrodes
Effects disturbing signal stability of amperometric biosensors for long-term measurements (Skládal) 145
Enzyme reactivation
ATPase and ATPsynthetase activity in myosin exposed to low power laser and pulsed electromagnetic fields (Bolognani et al.) 155
Erythrocyte membrane
The effect of ionic strength and outer surface charge on the membrane electric potential profile: a simple model for the erythrocyte membrane (Cortez-Maghelly, Bisch) 305
Ferricyanide reductions
Ferricyanide reduction by *Escherichia coli* cells: probable contribution of low molecular weight thiols (Oktyabrsky et al.) 267
Fractal model
Activation kinetics of the incorporation of colicin Ia into an artificial membrane: a Markov or a fractal model? (Cássia-Moura) 175
Fungal mutants
Electrostimulation of cellulase fermentation by pulsatile electromagnetically induced currents (Kerns et al.) 89
Glucose oxidase
The electrochemical polymerization of methylene blue and bioelectrochemical activity of the resulting film (Karyakin et al.) 35
Glutathione
Changes in redox potential of *Escherichia coli* culture and in extracellular glutathione status under osmotic shock (Oktyabrsky, Smirnova) 287
Green algae
Effect of artificial electron receptors on the non-linearity of the current-induced voltage response in the membrane of the green alga *Hydrodictyon reticulatum* (Metlička) 45
Human erythrocytes
Cell electroporation. Part 2. Experimental measurements of the kinetics of pore formationin human erythrocytes (Saulis, Venslauskas) 237
Human umbilical vein cells
Effect of pulsed magnetic fields on human umbilical endothelial vein cells (Goodman et al.) 125
Hydrodictyon reticulatum
Effect of artificial electron receptors on the non-linearity of the current-induced voltage response in the membrane of the green alga *Hydrodictyon reticulatum* (Metlička) 45

Intracellular potential
Intracellular potential change of *Tradescantia virginiana* L. leaf in response to CO_2 stress (Saito et al.) 133
Ionic strength effect
The effect of ionic strength and outer surface charge on the membrane electric potential profile: a simple model for the erythrocyte membrane (Cortez-Maghelly, Bisch) 305
Ion interaction
Ion interaction with carboxymethylagar: a polarographic study (Bosco et al.) 181
Ion-selective microelectrode
Intracellular potential change of *Tradescantia virginiana* L. leaf in response to CO_2 stress (Saito et al.) 133

Lampito Mauritii
Differential pulse voltage bioluminescence for probing the cells of *Lampito mauritii* (Santhanam) 211
Laser fields
ATPase and ATPsynthetase activity in myosin exposed to low power laser and pulsed electromagnetic fields (Bolognani et al.) 155
Light-scattering
Effect of polyamines on surface charge and light-scattering changes in thylakoid membranes (Doltchinkova et al.) 77
Liposome perforation
Microwave induced leakage of magnetoliposomes. Possible clinical implications (Babincová) 187

Magnetoliposomes
Microwave induced leakage of magnetoliposomes. Possible clinical implications (Babincová) 187
Markov model
Activation kinetics of the incorporation of colicin Ia into an artificial membrane: a Markov or a fractal model? (Cássia-Moura) 175
Membrane conductivity
Steady-state deformation of a vesicle in alternating electric fields (Hyuga et al.) 15
Membrane fusion
Kinetic mechanisms of membrane fusion mediated by electric fields (Dimitrov) 99
Membrane geometry
Effect of polyamines on surface charge and light-scattering changes in thylakoid membranes (Doltchinkova et al.) 77
Methylene blue
The electrochemical polymerization of methylene blue and bioelectrochemical activity of the resulting film (Karyakin et al.) 35
Microwave radiation
Microwave induced leakage of magnetoliposomes. Possible clinical implications (Babincová) 187
Model retina
Modulation of electrical responses of a photochromic membrane by light (Nakanishi, Yamaguchi) 27
Modulation
Modulation of electrical responses of a photochromic membrane by light (Nakanishi, Yamaguchi) 27
Myosin
ATPase and ATPsynthetase activity in myosin exposed to low power laser and pulsed electromagnetic fields (Bolognani et al.) 155

Non-linear voltage response
Effect of artificial electron receptors on the non-linearity of the current-induced voltage response in the membrane of the green alga *Hydrodictyon reticulatum* (Metlička) 45

Optical information processing
Modulation of electrical responses of a photochromic membrane by light (Nakanishi, Yamaguchi) 27
Organelle Electrokinetics
Organelle electrokinetics within plant cells (Levengood) 165
Osmotic shock
Changes in redox potential of *Escherichia coli* culture and in extracellular glutathione status under osmotic shock (Oktyabrsky, Smirnova) 287
Oxidation
Oxidation intermediates of L-ascorbic acid 2-glucoside by pulse radiolysis (Horii et al.) 277
Oxidation process
Voltammetric study of the diuretic xipamide (Legorburu et al.) 57

Phospholipid interactions
Modelling of the antibiotic peptide Ro 09-0198: specific interactions of Ro 09-0198 with phospholipidic molecules (Sy) 295

Photochromic membrane
Modulation of electrical responses of a photochromic membrane by light (Nakanishi, Yamaguchi) 27
Plant cells
Organelle electrokinetics within plant cells (Levengood) 165
Polarographic determination
Ion interaction with carboxymethylagar: a polarographic study (Bosco et al.) 181
Polyamines
Effect of polyamines on surface charge and light-scattering changes in thylakoid membranes (Doltchinkova et al.) 77
Pore formation kinetics
Cell electroporation. Part 2. Experimental measurements of the kinetics of pore formationin human erythrocytes (Saulis, Venslauskas) 237
Pore formation model
Cell electroporation. Part 1. Theoretical simulation of the process of pore formation in a cell (Saulis, Venslauskas) 221
Pulsatile electromagnetically induced currents
Electrostimulation of cellulase fermentation by pulsatile electromagnetically induced currents (Kerns et al.) 89
Pulsed magnetic fields
Effect of pulsed magnetic fields on human umbilical endothelial vein cells (Goodman et al.) 125
Pulse radiolysis
Oxidation intermediates of L-ascorbic acid 2-glucoside by pulse radiolysis (Horii et al.) 277
Pulse volt-bioluminescence
Differential pulse voltage bioluminescence for probing the cells of *Lampito mauritii* (Santhanam) 211

Quinonoid systems
Electrochemical potentials, charge-transfer and complexation properties of quinoid systems (Stradins et al.) 1

Radish seedling growth
Effects of CR-tuned 60 Hz magnetic fields on sprouting and early growth of *Raphanus sativus* (Smith et al.) 67
Raphanus sativus
Effects of CR-tuned 60 Hz magnetic fields on sprouting and early growth of *Raphanus sativus* (Smith et al.) 67
Redox potential
Changes in redox potential of *Escherichia coli* culture and in extracellular glutathione status under osmotic shock (Oktyabrsky, Smirnova) 287

Sulphonamidic diuretics
Voltammetric study of the diuretic xipamide (Legorburu et al.) 57
Surface charge
Effect of polyamines on surface charge and light-scattering changes in thylakoid membranes (Doltchinkova et al.) 77
The effect of ionic strength and outer surface charge on the membrane electric potential profile: a simple model for the erythrocyte membrane (Cortez-Maghelly, Bisch) 305
Synthetic membranes
Activation kinetics of the incorporation of colicin Ia into an artificial membrane: a Markov or a fractal model? (Cássia-Moura) 175

Thiols effect
Ferricyanide reduction by *Escherichia coli* cells: probable contribution of low molecular weight thiols (Oktyabrsky et al.) 267
Thylakoid membranes
Effect of polyamines on surface charge and light-scattering changes in thylakoid membranes (Doltchinkova et al.) 77
Tradescantia virginiana L.
Intracellular potential change of *Tradescantia virginiana* L. leaf in response to CO_2 stress (Saito et al.) 133

Vesicle deformation
Steady-state deformation of a vesicle in alternating electric fields (Hyuga et al.) 15
Voltammetric assay
Voltammetric study of the diuretic xipamide (Legorburu et al.) 57

Wound repair
Effect of pulsed magnetic fields on human umbilical endothelial vein cells (Goodman et al.) 125

Xipamide
Voltammetric study of the diuretic xipamide (Legorburu et al.) 57